U.S. COAST GUARD MARINE SAFETY OFFICE PORTLAND, MAINE

SAFETY ALERT

Fishery Diver Air Supply Safety

On October 15, 1997 an urchin diver died while engaged in fisheries diving in the vicinity of Marshall Island, Maine. As part of the investigation into the cause of this death, Coast Guard investigators received preliminary indication that the diver's tanks may have contained toxic levels of oil mist and carbon dioxide gas.

When the initial indication of possible toxic gas levels within the diver's air supply was received, Coast Guard Marine Safety Office Portland issued an urgent marine information broadcast advising divers in the Swans and Marshall Island areas to cease diving operations until accurate testing of the tank filling station used by the diver could be conducted. Federal investigators tested the air filling facility on Swans Island and determined that gas levels were within federal standards. The urgent safety advisory to divers was cancelled on receipt of this information.

While contaminated air from the tank filling station has been ruled out as a cause of death in this incident, following the issuance of the urgent safety advisory the Coast Guard received numerous reports and complaints of other tank filling stations supplying poor quality or contaminated air to divers.

Fisheries divers are advised that Maine State law regulates tank fill stations supplying air to scuba divers. These facilities are required to be licensed by the State of Maine on an annual basis, and are subject to an annual inspection of the compressor and facility to ensure that supplied air remains within State of Maine standards.

These standards include ensuring that air supplied to scuba diving tanks meets the following standards:

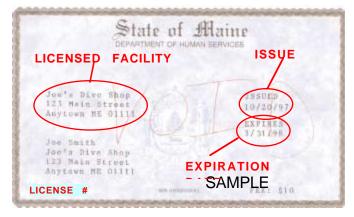
Oxygen: Not less than 19% by volume

Carbon Monoxide: 10 parts per million or less

Carbon Dioxide: 500 parts per million or less

Hydrocarbons (condensed): 5 mg/M3 or less

Air supply free of pronounced odor.



Maine State law requires all suppliers of air for scuba tanks to post a license in a conspicuous location at the tank filling facility. This license will list the name of the facility, the issue date, and the expiration date. Licenses are issued annually and are color coded.

Contamination of air with gaseous hydrocarbons, carbon monoxide, and carbon dioxide may be safe to breath on the surface; at depth however a diver would breath in two, three or four times as much of the contaminated gas based on the depth of the dive. Such levels of contaminated gas could lead to confusion, loss of conciousness, or death. A diver cannot smell or taste carbon monoxide, carbon dioxide and nitrogen. These gases are colorless, oderless, and tasteless (elevated levels of hydrocarbons may have a taste and odor).

Non contaminated air supplies are critical for the life safety of fisheries divers. State laws and regulations are in place and designed to protect divers from exposure to contaminated air. Divers suspecting receipt of contaminated air or aware of unlicensed fill facilities are urged to contact:

Maine State Division of Health Engineering (207) 287-5671

For further information on this Safety Alert contact:

USCG Marine Safety Office

P.O. Box 108

Portland, Maine 04112

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